

**VERBESINA PELLUCIDA (ASTERACEAE-HELIANTHEAE),
A NEW SPECIES FROM THE ISTHMUS OF TEHUANTEPEC,
OAXACA, MEXICO**

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Collecting efforts in the District of Tehuantepec, Oaxaca, Mexico, have resulted in the discovery of a new species of *Verbesina*. The species is described and illustrated, and its affinities to other verbesinas of the region are discussed.

Verbesina pellucida Villaseñor & Panero, sp. nov.—TYPE: MEXICO. Oaxaca: Km 10 of the rd to Santa María Chimalapa, ca. 10 km E of the intersection of this rd and the rd Palomares-Matías Romero, 400 m, 17 Feb 1992, *Panero & Campos 2746* (holotype: MEXU!; isotypes: K! MA! MICH! MY! QCA! SI! TENN! TEX! UC! US! 7 additional isotypes to be distributed by MEXU). Fig. 1.

A *V. auriculata* capitulis majoribus, foliis sessilibus oblanceolatis, et phyllariis exterioribus herbaceis suborbicularibus differt.

Small shrubs 0.4–0.8 m tall; stems terete, herbaceous parts somewhat succulent, puberulent, stramineous or beige, woody parts glabrous and dark brown. Leaves alternate, pinnately veined, apparently readily deciduous and only the uppermost present at anthesis; blades 2.8–14.1 cm long, 1.4–4.6 cm wide, somewhat smaller distally towards the capitulescence, oblanceolate to oblong, adaxial surface glabrous, bluish green, abaxial surface glabrous and creamy green, central vein glabrous, stramineous, raised and conspicuously outlined against green background, higher-order veins forming a pellucid reticulum visible with the unaided eye, margins crenate, apex acuminate to acute, rarely obtuse, base attenuate. Capitulescence of 1–3 heads, solitary or simple dichasia; peduncles (2–) 5–9 cm long, puberulent, stramineous or beige. Heads heterogamous, radiate, hemispheric, 0.8–1.2 cm high 1.0–1.5 cm wide (excluding ligules); receptacle 0.5–0.7 cm wide, flat to slightly convex. Phyllaries 17–22 in 2–3 subequal series; phyllaries of first series 0.8–1.2 cm long, 4–5 mm wide, appressed, herbaceous, foliiform, oblong to suborbicular, sparsely puberulent, green with a conspicuous reticulate venation, margins sparsely ciliate; phyllaries of second series 7–9 mm long, 1.5–2.0 mm wide, appressed, herbaceous, chartaceous, oblanceolate, resembling pales, glabrous to sparsely puberulent, stramineous green, margins sparsely ciliate or glabrous. Pales 7–8 mm long, ca. 2.5 mm wide, obovate to oblanceolate, shallowly



FIG. 1. *Verbesina pellucida* (Cedillo 1121). a. Flowering branch. b. Ray flower. c. Disk flower. d. Disk achene. (a, bar = 1.5 cm; b, bar = 5 mm; c, bar = 4 mm; d, bar = 2 mm.)

conduplicate, conspicuously concave distally, sparsely puberulent or glabrous, stramineous-green, apex acute to acuminate. Ray flowers 13–17, corollas golden-yellow, pistillate; ligules 1.1–1.3 cm long, ca. 5 mm wide, ovate to oblong, sparsely puberulent on veins of abaxial surface, apex trifid; tube ca. 1.5 mm long, moderately puberulent. Ray achene (immature) ca. 5 mm long, 2.5 mm wide, oblanceolate to oblong, sparsely sericeous, shiny black, wings sparsely ciliate, stramineous or yellowish green; pappus none. Disk flowers (150–) 170–200 (–220), corollas golden-yellow, hermaphrodite; throat ca. 4 mm long, narrowly campanulate to tubular, sparsely puberulent, especially on base; tube 1.0–1.2 mm long, glabrous to sparsely puberulent; lobes 0.5–0.8 mm long; anthers ca. 2 mm long, black, appendages ca. 0.2 mm long, stramineous; styles 4.0–4.5 mm long, style branches 1 mm long, acute. Disk achenes resembling ray achenes, sparsely sericeous. Chromosome number: $n = 17$.

Verbesina pellucida resembles *V. auriculata* DC. in several noteworthy features. The two species have oblanceolate, concave pales (also seen in the related *V. abscondita* Klatt), stramineous or beige, succulent stems, and a tendency to have entirely winged petioles. *Verbesina pellucida* can be readily separated from *V. auriculata* by differences in the involucre and capitulescence. *Verbesina pellucida* has an involucre of subequal phyllaries; the phyllaries of the outermost series are herbaceous, foliiform, and suborbicular. In *V. auriculata*, the involucre is graduated, and the phyllaries of the outermost series are lanceolate to narrowly lanceolate, indurate at base, and have reflexed herbaceous apices. The capitulescence of *V. pellucida* is distinctive in that the heads are borne on relatively long peduncles and are solitary or arranged in simple dichasia, whereas in *V. auriculata* and *V. abscondita* the heads are arranged in monochasial thyrsoid capitulescences. The new species, because of its conspicuously large heads, could be confused with the parapatric *V. sousae* and *V. oaxacana*; however, it can be easily separated from them by its sessile, oblanceolate leaves and herbaceous involucre.

The specific epithet is derived from the conspicuous pellucid reticulum formed by the higher order veins.

ADDITIONAL SPECIMENS EXAMINED. **Mexico.** OAXACA: Distrito de Juchitán, Mpio. de Asunción Ixtaltepec, 5 km al W de Santiago Ixtaltepec, por la carr. a Santa María Chimalapa, 29 Aug 1991, Campos 3878 (MEXU); Distrito de Juchitán, Mpio. de Santa María Guienagati, 11 km al NW of Lachiviza, por el camino a Lachiguiri, 15 Mar 1986, Tenorio 11121, Torres & Martínez (CHAPA, MEXU); Distrito de Juchitán, Mpio. de Asunción Ixtaltepec, 8 km al NW de Santiago Ixtaltepec, 200 m, 23 Feb 1982, Cedillo 1121 (ENCB, MEXU, RSA).

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